



DEVELOPMENT SERVICES DEPARTMENT
ENVIRONMENTAL COORDINATOR
450 110th Ave NE
BELLEVUE, WA 98009-9012

DETERMINATION OF NON-SIGNIFICANCE

PROPONENT: David Meade, Piper-Cole Architects

LOCATION OF PROPOSAL: 3002 W Lake Sammamish Parkway SE

DESCRIPTION OF PROPOSAL: Construct an addition to an existing garage, retaining walls, and landscaping improvements associated within a steep slope critical area.

FILE NUMBERS: 16-148232-LO **PLANNER:** Reilly Pittman

The Environmental Coordinator of the City of Bellevue has determined that this proposal does not have a probable significant adverse impact upon the environment. An Environmental Impact Statement (EIS) is not required under RCW 43.21C.030(2)(C). This decision was made after the Bellevue Environmental Coordinator reviewed the completed environmental checklist and information filed with the Land Use Division of the Development Services Department. This information is available to the public on request.

- ☐ There is no comment period for this DNS. There is a 14-day appeal period. Only persons who submitted written comments before the DNS was issued may appeal the decision. A written appeal must be filed in the City Clerk's office by 5:00 p.m. on _____.
- ☒ This DNS is issued after using the optional DNS process in WAC 197-11-355. There is no further comment period on the DNS. There is a 14-day appeal period. Only persons who submitted written comments before the DNS was issued may appeal the decision. A written appeal must be filed in the City Clerk's Office by 5 p.m. on **8/24/2017**.
- ☐ This DNS is issued under WAC 197-11-340(2) and is subject to a 14-day comment period from the date below. Comments must be submitted by 5 p.m. on _____. This DNS is also subject to appeal. A written appeal must be filed in the City Clerk's Office by 5:00 p.m. on _____.

This DNS may be withdrawn at any time if the proposal is modified so as to have significant adverse environmental impacts; if there is significant new information indicating a proposals probable significant adverse environmental impacts (unless a non-exempt license has been issued if the proposal is a private project); or if the DNS was procured by misrepresentation or lack of material disclosure.


Environmental Coordinator
Carol V. Holland

8/10/2017

Date

OTHERS TO RECEIVE THIS DOCUMENT:

- ☐ State Department of Fish and Wildlife / Stewart.Reinbold@dfw.gov; Christa.Heller@dfw.wa.gov;
- ☒ State Department of Ecology, Shoreline Planner N.W. Region / Jobu461@ecy.wa.gov; sepaunit@ecy.wa.gov
- ☐ Army Corps of Engineers Susan.M.Powell@nws02.usace.army.mil
- ☐ Attorney General ecyolyef@atg.wa.gov
- ☒ Muckleshoot Indian Tribe Karen.Walter@muckleshoot.nsn.us; Fisheries.fileroom@muckleshoot.nsn.us



**City of Bellevue
Development Services Department
Land Use Staff Report**

Proposal Name: Tourmalet Remodel

Proposal Address: 3002 W Lake Sammamish Parkway SE

Proposal Description: Land Use review of a Critical Areas Land Use Permit to construct an addition to a garage, retaining walls, and landscaping that modifies a steep slope critical area and mitigation planting in the shoreline buffer of Lake Sammamish.


File Number: 16-148232-LO

Applicant: David Meade, Piper-Cole Architects


Decisions Included Critical Areas Land Use Permit
(Process II. 20.30P)

Planner: Reilly Pittman, Land Use Planner

**State Environmental Policy Act
Threshold Determination:** **Determination of Non-Significance**


Carol V. Helland, Environmental Coordinator
Development Services Department

Director's Decision: **Approval with Conditions**
Michael A. Brennan, Director
Development Services Department

By: 
Elizabeth Stead, Land Use Director

Application Date: December 5, 2016
Notice of Application Date: January 5, 2017
Decision Publication Date: August 10, 2017
Project Appeal Deadline: August 24, 2017

For information on how to appeal a project proposal, visit the Permit Center at City Hall or call 425-452-6800. Appeal of the SEPA Threshold Determination must be made to the City of Bellevue City Clerk's Office by 5 p.m. on the date noted above for SEPA appeal deadline.

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Attachments

1. Site Plan – Enclosed
2. Critical Areas Report, Mitigation Plan, and Maintenance Plan – Enclosed
3. Geotech Report and Addendum Letters – In File
4. SEPA Checklist – In File
5. Survey – In File
6. Forms and Application Materials – In File

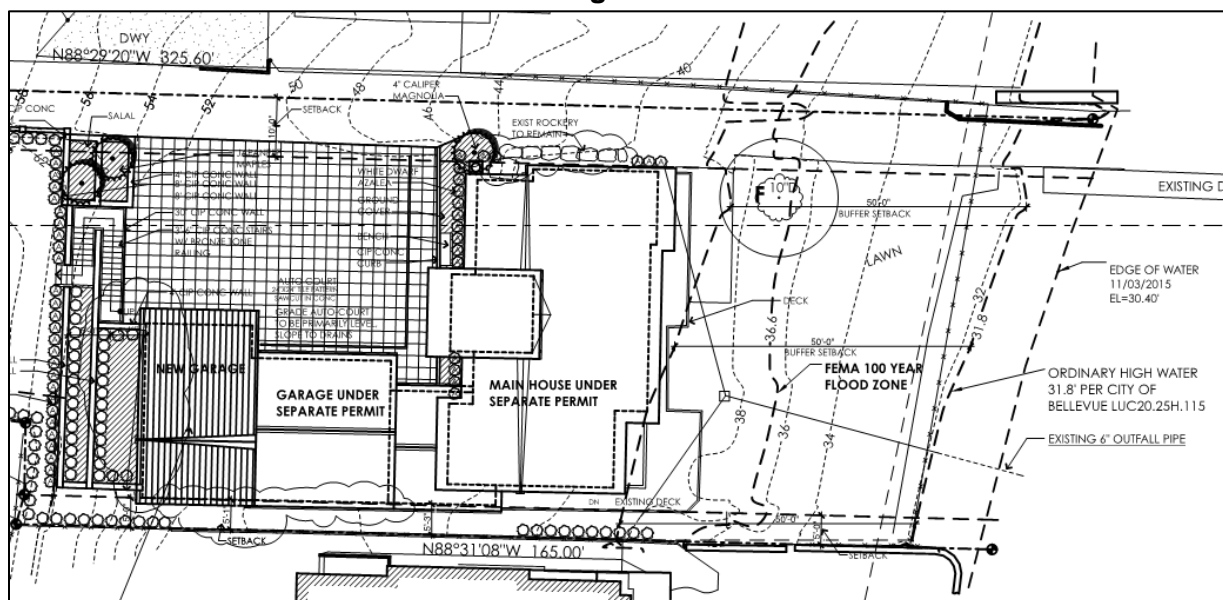
I. Proposal Description

The proposal is to construct an addition to an existing garage, retaining walls, a stairway and landscaping within a steep slope critical area. This proposal would remove the slope from protection as a critical area. The steep slope and much of the property are developed and/or maintained as ornamental landscaping. The existing slope was constructed when the area was developed but qualifies as a steep slope critical area per LUC 20.25H.120. The proposal removes this slope which is approximately 1,600 square feet and replaces the slope with a terraced retaining wall system and uses the foundation wall of the expanded garage as retention. The terraced land is proposed to be planted with 400 square feet of native vegetation. 120 square feet of planting is also proposed in the shoreline buffer to improve the ecological function of the site.

LUC 20.25H Section VII requires a Critical Areas Land Use Permit for any modification of a steep slope critical area through a critical areas report. A critical areas report process allows sites that are degraded ecologically to request modifications to critical areas provided there is a net increase in ecological function on the site as a result of the project. The project proposes to modify a steep slope critical area and improve the ecological function of the site by installing native plants in the slope area and shoreline buffer.

Also proposed is replacement of an existing patio, drainage line and a small landscape wall that provides no retention function, other than to contain the patio, within the shoreline setback from the buffer of Lake Sammamish. The replacement of these existing improvements is in the same location and configuration. These replaced improvements are considered existing landscaping features which are allowed to be replaced per LUC 20.25H.055.C.3.h. See figure 1 below for the project site plan.

Figure 1



II. Site Description, Zoning, Land Use and Critical Areas

A. Site Description

The project site is located at 3002 W Lake Sammamish Pkwy SE in the Newcastle subarea. The property is accessed from Lake Sammamish Pkwy west of the property by a shared driveway road. The property is surrounded to the north and south by residential development and the lake is to the east. The property is mostly developed and vegetation consists of maintained ornamental landscaping. Significant trees are found mostly on the upper portion of the property in a fenced pasture-like area to the west of the garage. The steep slope critical areas on the property are located between the existing garage and the fenced area west of the garage. This slope was created as part of past grading related to residential construction of the lots in the area. See figure 2 for existing site condition.

Figure 2



B. Zoning

The property is zoned R-5, a Single Family Residential zoning district. The surrounding properties, most developed with single family homes, are also zoned R-5.

C. Land Use Context

The property has a Comprehensive plan Land Use Designation SF-H, Single-Family High Density. The proposed use will be residential in keeping with this Land Use designation

D. Critical Areas On-Site and Regulations

i. Geologic Hazard Areas

Geologic hazards pose a threat to the health and safety of citizens when commercial, residential, or industrial development is inappropriately sited in areas of significant hazard. Some geologic hazards can be reduced or mitigated by engineering, design, or modified

construction practices. When technology cannot reduce risks to acceptable levels, building in geologically hazardous areas is best avoided (WAC 365-190).

Steep slopes may serve several other functions and possess other values for the City and its residents. Several of Bellevue's remaining large blocks of forest are located in steep slope areas, providing habitat for a variety of wildlife species and important linkages between habitat areas in the City. These steep slope areas also act as conduits for groundwater, which drains from hillsides to provide a water source for the City's wetlands and stream systems. Vegetated steep slopes also provide a visual amenity in the City, providing a "green" backdrop for urbanized areas enhancing property values and buffering urban development.

III. Consistency with Land Use Code Requirements:

A. Zoning District Dimensional Requirements:

Conformance with all zoning requirements will be confirmed as part of the building permit review. The proposal appears to conform to the requirements of the R-5 zone. **See Conditions of Approval in Section X of this report.**

B. Critical Areas Requirements LUC 20.25H:

The City of Bellevue Land Use Code Critical Areas Overlay District (LUC 20.25H) establishes performance standards and procedures that apply to development on any site which contains in whole or in part any portion designated as critical area, critical area buffer or structure setback from a critical area or buffer. The project area proposes to modify a steep slope critical area and the following sections of the Land Use Code apply.

i. Consistency with LUC 20.25H.145

Staff reviewed the geotechnical report submitted by Geological and Geotechnical Consulting dated January 19, 2016, June 22, 2016, and an addendum letter dated June 23, 2017 that addressed the slope and critical area requirements of the Land Use Code. The geotech has found that the proposed modification of the slope "will have no adverse impact on the stability of the slope or on adjacent properties" and that once completed the site will have "increased stability" (June 22, 2017 letter, pg. 1). The geotech is a certified engineer who is qualified to make determinations as to slope stability. Provided the project is constructed per the geotech's recommendations the engineer finds that the project can be constructed as proposed and will "not result in greater risk or a need for increased buffers on neighboring properties" (pg. 1). The geotech found that while the slope qualifies as a steep slope due to grade that it is not a natural slope and was the result of prior site grading that created a flat building area on the property upslope and to the west. There are no other steep slopes in vicinity.

ii. Consistency with LUC 20.20.125

The proposal removes the slope from protection as a critical area. The slope is not a natural contour that was created through natural processes. The proposal uses terraced retaining walls and the foundation of the proposed garage as retention. The project geotechnical engineers found that the proposal improves slope stability and will not result

in increased buffers. The terraced land that results from the retaining wall construction is proposed to be planted with native vegetation.

iii. Consistency with LUC 20.25H.250

The proposed removal of a steep slope from protection as a critical area through a Critical Areas Report requires a demonstration that a site is degraded ecologically and that the site function and value can be improved as part of the project. The existing site is developed with permanent structures and improvements including walls, paved areas, and ornamental landscaping. The proposal includes the installation of 400 square feet of planting within the new terraced area and 120 square feet of planting along the shoreline buffer of Lake Sammamish. The shoreline planting removes lawn and installs native vegetation that results in an improvement of the buffer function that improves the site function above what currently exists. The mitigation plan (see Attachment 2) must be submitted along with the required building permit. **See Conditions of Approval in Section X of this report.**

IV. Public Notice and Comment

Application Date:	December 5, 2016
Public Notice (500 feet):	January 5, 2017
Minimum Comment Period:	January 19, 2017

The Notice of Application for this project was published the City of Bellevue weekly permit bulletin and Seattle Times on January 26, 2016. It was mailed to property owners within 500 feet of the project site. A comment was received from Karen Walter with the Muckleshoot Tribe regarding required planting along the shoreline related to a newly approved dock and that this planting should be shown on the plans for this project. The planting area has been depicted on the project plans and will be installed as part of the dock permit.

V. Summary of Technical Reviews

A. Clearing and Grading

The Clearing and Grading Division of the Development Services Department has reviewed the proposed site development and geotech report for compliance with Clearing and Grading codes and standards. The Clearing and Grading staff approved the application.

VI. State Environmental Policy Act (SEPA)

The environmental review indicates no probability of significant adverse environmental impacts occurring as a result of the proposal. The Environmental Checklist submitted with the application adequately discloses expected environmental impacts associated with the project. The City codes and requirements, including the Clear and Grade Code, Utility Code, Land Use Code, Noise Ordinance, Building Code and other construction codes are expected to mitigate potential environmental impacts. Therefore, issuance of a Determination of Non-Significance (DNS) is the appropriate threshold determination under the State Environmental Policy Act (SEPA) requirements.

A. Earth, Air, and Water

Earth movement will result from the removal of the steep slope and installation of retaining walls and expansion of the garage. The site will be required to comply with the City's BMPs and sediment and erosion controls for clearing and grading under the future building permit.

C. Animals

The property is adjacent to Lake Sammamish which does support salmonid species, other fish, mammals and bird species. No work in or over the water is proposed. Animal use of the steep slope area is limited as there are no trees on the slope, it is surrounded by existing development, and it is maintained landscaping. Any animal use will be limited to small to medium animals and birds.

D. Plants

Trees on the site include ornamental and nonsignificant trees found in the upland pasture-like area. The vegetation impacted by this proposal is ornamental and does not result in tree removal. Trees may be proposed for removal separate from this proposal as part of the building permit and must comply with retention requirements of the Land Use Code. 520 square feet of mitigation planting is proposed to be installed (Attachment 2). **See Conditions of Approval in Section X of this report.**

E. Noise

The site is adjacent to single-family residences whose residents are most sensitive to disturbance from noise during evening, late night and weekend hours when they are likely to be at home. Construction noise will be limited by the City's Noise Ordinance (Chapter 9.18 BCC) which regulates construction hours and noise levels. Sound generated by pile driving for dock construction will require sound attenuation measures. **See Section X for a related condition of approval.**

VII. Changes to Proposal Due to Staff Review

Changes were requested to clarify the geotechnical report responses to the Land Use Code requirements. The foundation of the garage was recommended to be used as retention in keeping with the geotechnical recommendations. Work proposed in the shoreline setback was reduced to only replace existing improvements and not result in expanded disturbance. Planting in the shoreline was also encouraged so that the site could achieve the necessary improvement of ecological function required for approval under a critical areas report.

VIII. Decision Criteria

A. 20.25H.255 Critical Areas Report – Decision Criteria – General

The Director may approve, or approve with modifications, the proposed modification where the applicant demonstrates:

1. **The modifications and performance standards included in the proposal lead to levels of protection of critical area functions and values at least as protective as application of the regulations and standards of this code;**
The performance standards related to steep slopes are being met where possible,

given that the slope is removed by the proposal. As reviewed in Section III above, the project geotechnical engineer found that the proposal improves slope stability and uses the foundation of the garage to aid retention. The proposal does not remove significant vegetation as the slope was constructed from prior development and has been maintained with ornamental vegetation. The proposed planting in the shoreline buffer results in an overall site function that is greater than the existing site function. An analysis of site functions can be found in the submitted critical areas report which is attachment 2.

2. Adequate resources to ensure completion of any required mitigation and monitoring efforts;

The submitted five-year maintenance and monitoring plan included in the critical areas report (attachment 2) is approved as conceptual with a final plan required to be submitted under the building permit. Staff inspection of the planting is required after installation and to end of the monitoring. A maintenance surety is required to be submitted prior to building permit issuance for an amount that is 100 percent of the estimated cost of maintenance and monitoring for five years. A cost estimate is required to be submitted under the building permit. **See Conditions of Approval in Section X of this report.**

3. The modifications and performance standards included in the proposal are not detrimental to the functions and values of critical area and critical area buffers off-site;

The proposal is not detrimental to the functions and values of the critical areas and improves the functions provided by the shoreline on this property by installing native vegetation in the shoreline buffer that replaces existing lawn. The installed vegetation includes trees, shrubs and ground cover which will provide more ecological function than the existing lawn.

4. The resulting development is compatible with other uses and development in the same land use district.

The proposed construction is compatible with the adjacent residential uses as these improvements are normally associated with residential development. Therefore, the proposal is allowed in this land use district and is compatible.

B. 20.30P.140 Critical Area Land Use Permit Decision Criteria – Decision Criteria

The Director may approve, or approve with modifications an application for a Critical Area Land Use Permit if:

1. The proposal obtains all other permits required by the Land Use Code;

The applicant must revise building permit 16-124524-BR and any associated permits in conformance with the plans approved with this permit approval. **See Conditions of Approval in Section X of this report.**

2. **The proposal utilizes to the maximum extent possible the best available construction, design and development techniques which result in the least impact on the critical area and critical area buffer;**

The proposed foundation of the garage is used as retention and the site uses terraced retention walls minimizing the amount of site grading and slope modification. The project has been reviewed by a geotechnical engineer who found that the project improved stability of the slope. The shoreline vegetation is enhance by the proposal resulting in improved critical area function on the site.

3. **The proposal incorporates the performance standards of Part 20.25H to the maximum extent applicable, and ;**

As discussed in Section III of this report and discussed in the submitted critical areas report, the applicable performance standards of LUC Section 20.25H are being met.

4. **The proposal will be served by adequate public facilities including street, fire protection, and utilities; and;**

The proposed activity will be served by adequate public facilities.

5. **The proposal includes a mitigation or restoration plan consistent with the requirements of LUC Section 20.25H.210; and**

The proposal includes 520 square feet of mitigation planting. The maintenance and monitoring plan shall be for a total of five years. A copy of the planting plan and maintenance and monitoring plan is required to be submitted under the building permit for this work. **See Conditions of Approval in Section X of this report.**

6. **The proposal complies with other applicable requirements of this code.**

As discussed in this report, the proposal complies with all other applicable requirements of the Land Use Code.

IX. Conclusion and Decision

After conducting the various administrative reviews associated with this proposal, including Land Use Code consistency, SEPA, City Code and Standard compliance reviews, the Director of the Development Services Department does hereby **approve with conditions** the modification of a steep slope critical area to construct an addition to a garage and associated improvements. **Approval of this Critical Areas Land Use Permit does not constitute a permit for construction. A building permit is required and all plans are subject to review for compliance with applicable City of Bellevue codes and standards.**

Note- Expiration of Approval: In accordance with LUC 20.30P.150 a Critical Areas Land Use Permit automatically expires and is void if the applicant fails to file for a building permit or other necessary development permits within one year of the effective date of the approval.

X. Conditions of Approval

The applicant shall comply with all applicable Bellevue City Codes and Ordinances including but not limited to:

<u>Applicable Ordinances</u>	<u>Contact Person</u>
Clearing and Grading Code- BCC 23.76	Savina Uzunow, 425-452-7860
Land Use Code- BCC Title 20	Reilly Pittman, 425-452-4350
Noise Control- BCC 9.18	Reilly Pittman, 425-452-4350

The following conditions are imposed under the Bellevue City Code or SEPA authority referenced:

- 1. Building Permit:** Approval of this Critical Areas Land Use Permit does not constitute an approval of a development permit. Building permit 16-124524-BR is required to be revised or another permit must be submitted and approved. Plans submitted as part of any permit application shall be consistent with the activity permitted under this approval.

Authority: Land Use Code 20.30P.140
Reviewer: Reilly Pittman, Development Services Department

- 2. Land Use Inspection:** Following installation of mitigation planting, the applicant shall contact Land Use staff to inspect the planting area prior to final building inspection.

Authority: Land Use Code 20.30P.140
Reviewer: Reilly Pittman, Development Services Department

- 3. Mitigation Planting Plan:** The mitigation plan (Attachment 2) must be submitted as part of the required building permit.

Authority: Land Use Code 20.25H.220
Reviewer: Reilly Pittman, Development Services Department

- 4. Maintenance and Monitoring Plan:** The submitted maintenance and monitoring plan is required to be submitted under the building permit. Annual monitoring reports with photos of the planting area are required to be submitted that document how the plants are meeting the chosen performance standards. Monitoring reports and questions can be emailed to Reilly Pittman at rpittman@bellevuewa.gov.

Authority: Land Use Code 20.30P.140
Reviewer: Reilly Pittman, Development Services Department

- 5. Maintenance and Monitoring Surety:** A financial surety is required to be submitted based on 100 percent of the cost to maintain and monitor the plants for five years. A cost estimate is required to be provided under the building permit. A financial surety is required to be posted prior to building permit issuance. Release of the surety is contingent upon a final inspection of the planting by Land Use Staff that finds the maintenance and monitoring plan was successful.

Authority: Land Use Code 20.25H.220
Reviewer: Reilly Pittman, Development Services Department

- 6. Noise Control:** Noise related to construction is exempt from the provisions of BCC 9.18 between the hours of 7 am to 6 pm Monday through Friday and 9 am to 6 pm on Saturdays, except for Federal holidays and as further defined by the Bellevue City Code. Noise emanating from construction is prohibited on Sundays or legal holidays unless expanded hours of operation are specifically authorized in advance. Requests for construction hour extension must be done at least one week in advance with submittal of a construction noise expanded exempt hours permit.

Authority: Bellevue City Code 9.18
Reviewer: Reilly Pittman, Development Services Department

KEY	
EXISTING GRADE	~ ~ ~
PROPOSED GRADE	~ ~ ~
FOOTPRINT	— — —
SETBACKS	-----
WATER METER	⊕
GAS METER	⊞
UNDERGRD POWER	—+—+—
SEWER	—-—-—
SILT FENCE	—○—○—
FENCE	—+—+—

FAR CALCULATION	
FLOOR AREA	1,398sf + 1,811sf + 1,524sf + 919sf = 5,652sf
LOT AREA = 19,973sf	
19,973sf x .50 = 9,896.5sf	
FAR = .283, .50 ALLOWED	

TREE TABLE	
A. 24" DECIDUOUS	TO REMAIN
B. 8" JAP. MAPLE	TO REMAIN
C. 8" DECIDUOUS	TO BE REMOVED
D. 10" APPLE	TO BE REMOVED
E. 6" DECIDUOUS	TO BE REMOVED
F. 10" DECIDUOUS	TO BE REMOVED
G. 3" JAP. MAPLE	TO BE RELOCATED
H. 16" FIR	TO BE REMOVED
J. 6" DECIDUOUS	TO BE REMOVED
K. 4" CYPRESS	TO BE REMOVED
L. 4" RHODI	TO BE REMOVED

- NOTES
- 1). DO NOT ALLOW SOILS FROM THE SITE IN THE RIGHT OF WAY. BROOM CLEAN AS REQUIRED.
 - 2). PROTECT ALL LANDSCAPING TO REMAIN.
 - 3). CALL BEFORE YOU DIG.
 - 4). SECURE ALL BUILDING MATERIALS, TOOLS & THE SITE @ THE END OF EACH WORK DAY.
 - 5). EXIST ASPHALT DRIVEWAY WILL BE THE CONST ENTRANCE.
 - 6). ALL WORK SHALL BE PERFORMED DURING CITY OF BELLEVUE WORK HOURS.
 - 7). INSTALL CATCH BASIN INSERTS IN CATCH BASINS ADJ TO THE PROJECT. REMOVE AFTER FINAL INSPECTION.

NO CHANGES TO THE GREENSCAPE EXCEPT TO ADD NEW TREES

TAX# 122405-9127
24-HOUR EROSION CONTROL
CONTACT NAME & PHONE
MIKE GHALI- 206-954-6095

REFER TO ENGINEERED DRAINAGE PLAN FOR ALL DRAINAGE INFORMATION

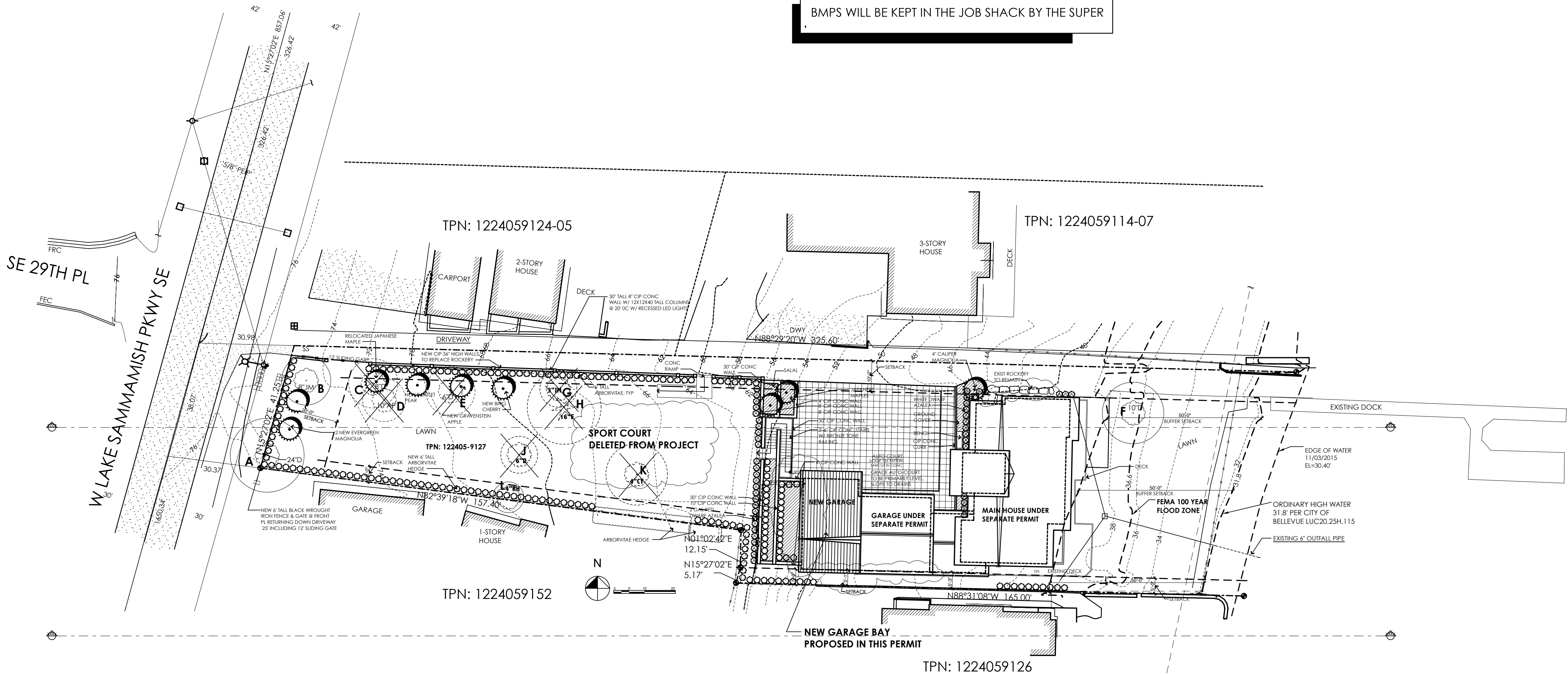
BMPS WILL BE KEPT IN THE JOB SHACK BY THE SUPER

IMPERVIOUS SURFACE CALCULATION	
LOT AREA	19,793 sqft
HOUSE & GARAGE W/ OVERHANGS	3,410 sqft
DRIVEWAY, WALKWAY & DECK	6,219 sqft
TOTAL PROPOSED IMPERVIOUS AREA	9,629 sqft
IMPERVIOUS AREA PERCENTAGE	48.6%

LOT COVERAGE	
LOT AREA	19,793 sqft
HOUSE & GARAGE	2,997 sqft
% OF LOT COVERAGE BY STRUCTURES	15.4%

SPOT ELEVATIONS FOR HEIGHT CALC

1. 48	11. 39.2	21. 43
2. 48	12. 39.2	22. 45
3. 48	13. 39.2	23. 46
4. 48.4	14. 39.2	24. 48
5. 49	15. 39.2	25. 48
6. 49	16. 39.2	26. 48
7. 49	17. 39.2	
8. 49	18. 39.2	
9. 48	19. 40	
10. 46	20. 42	
TOTAL=1,159.6/26 = 44.6' AEG		
MAIN FLOOR FFE = 49'		
ROOF AT MIDPOINT = 69'		
RIDGE AT HIGH POINT = 75'		
ALLOWABLE BLDG HEIGHT = 79.6'		



CRITICAL AREAS MITIGATION SUMMARY

Tourmalet Remodel 16-148232-LO

Date: June 7, 2017
To: Reilly Pittman – City of Bellevue
Dan McNamara - Homeowner

From: Carl Hadley
Subject: Mitigation Summary

Two critical areas will be impacted during redevelopment of the Tourmalet site:

1. Steep slope
2. Lake Sammamish buffer

This memo provides quantitative calculations and justification for how the applicant proposes to mitigate each impact as needed to demonstrate a net gain in the most important critical area and critical area buffer functions.

Steep Slope

An over-steepened slope was left by a previous land-owner when the site was originally graded. The slope is not natural; nominally meets the size criteria for a steep slope (1,600 sf and 14 foot vertical rise); is isolated and not part of or contiguous to a larger steep slope area; is located about 130 feet from OHW with an intervening structure; and neither the slope nor the buffer has any natural vegetation. Given the existing manmade slope contours and very poor ecological condition, protection of the slope is not required under LUC 20.25.125, does not mitigate the slope hazard, and does not preserve any significant natural habitat or ecological shoreline functions on the site.

The steep slope on the subject property is a critical area only by virtue of the risk of failure (steep slope hazard area) and not due to ecologically sensitive habitat (as differentiated in LUC 20.25H.010). In fact, this particular slope has minimal existing ecological benefit due to lack of native vegetation and distance from water. As such, little environmental mitigation is required to offset lost ecological functions. The homeowner is proposing to mitigate the geologic hazard posed by the steep slope utilizing engineered stabilization methods. This will reduce the hazardous condition and provide safety functions (protection of public health, safety and welfare) as designated under LUC 20.25H.010. The lost ecological functions (non-native vegetation, pervious soils) will be mitigated in an area of potentially higher habitat value in the area within 25 feet of the ordinary high water mark (OHW) of Lake Sammamish.

The approximately 1,600 sf slope will be stabilized to eliminate the landslide hazard. A little over 400 sf of planting will be created in the stabilized area. This will result in the loss of approximately 1,200 sf of non-native species and pervious soils. As mitigation, the applicant will set aside and plant with native species 120 sf of the Lake Sammamish buffer currently in lawn starting adjacent to OHW based on a 1:10 ratio for 1,200 sf of permanent impact to the steep slope area (See attached figures). This is in addition to the native plantings along the shoreline that were required for the dock.

CA Impacts	Existing	Proposed	Change
Ecological Function			
Steep slope	1,600 sf (very low*)	400 sf (moderate)	-1,200 sf in shoreline
Lake buffer	120 sf (very low)	120 sf (high)	+120 sf in CA
Steep Slope Hazard	1,600 sf	0 sf	-1,600 sf

* Habitat function rating

Lake Sammamish Buffer

An area of buffer approximately 32 feet long and 2 feet wide currently consisting of lawn will temporarily be disturbed to replace a drain pipe. No vegetation other than lawn will be disturbed. No temporary or permanent impacts to ecological functions are expected, and no mitigation is proposed.

Effects of the Proposed Action on Shoreline Functions

Standard shoreline ecological functions include water quality improvements, bank protection, organic material source, and wildlife habitat. Each of these functions is reviewed below for both the pre- and post-redevelopment condition.

In shoreline areas, the standard for protection is “no net loss”. No net loss means that, following an action, shoreline ecological functions necessary to sustain shoreline natural resources are equivalent to or greater than ecological functions immediately prior to the action. As noted in Ecology guidelines for the Shoreline Management Act, the “no net loss” standard focuses on shoreline ecological functions “as they currently exist”¹. In this case “as they currently exist” refers to the conditions with the existing house, landscaped yard, patio, dock, and general lack of native vegetation anywhere within 200 feet of Lake Sammamish. No net loss does not compare to theoretical, perfect, or undisturbed conditions as may have occurred before the area was developed.

Shoreline habitat in its natural condition performs many functions essential to fish survival and productivity. Vegetation in riparian areas can provide shade and helps maintain cool water temperatures needed by most fish native to the Pacific Northwest. Plant roots stabilize banks, help control erosion and sedimentation, and can offer refuge habitat for juvenile fish.

¹ See WAC 173-26-201(2)(c) (no net loss focuses on sustaining “existing shoreline natural resources” and protecting shoreline resources “as they currently exist”).

Vegetation creates overhanging cover for fish. Where present, trees and shrubs contribute leaves, twigs, and insects to waterbodies, thereby providing basic food and nutrients that support fish and aquatic wildlife. Large trees that fall can create refuge habitat needed by small fish for cover and protection from predators. Riparian vegetation, litter layers, and soils filter incoming sediments and pollutants, thereby assisting in the maintenance of high water quality needed for healthy fish populations².

Primary ecological functions provided within the Lake Sammamish shoreline on the project site are described below along with an evaluation of the project impact. Shoreline functions and values are based on WDFW guidelines³ and other best available science⁴. The discussion is summarized in Table 1.

Existing conditions on the subject property consists of a gently sloped sand and gravel beach, a moderately sloped terrace on which the existing house, garage, residential landscaping, and driveway are located, a short steep slope which has been highly modified with landscaping plants and weeds, and a second higher terrace covered with grass and weeds. There are a few moderate sized trees on the site, most of which are non-native.

Water Quality

Vegetation adjacent to a waterbody can improve water quality by filtering pollutants, removing nutrients, and preventing sediment introduction. The water quality function of the existing shoreline area is minimal. Most of the site is impervious and drains down the driveway directly into the lake. The steep slope drains directly to impervious pavement so heavier rainfall carries some silt down the pavement to Lake Sammamish. Some areas contain grass or landscaping and likely infiltrate. Rapid infiltration and short travel times means that most water landing on the beach and lawns ends up in Lake Sammamish relatively quickly. Any foreign material such as silts and landscaping or roadway chemicals receive minor filtering action by the soils before water reaches the lake.

Re-developing the site will result in little change with how stormwater runoff is managed. Replacement of some of the lawn with new native plantings will slightly improve the quality of runoff from the site assuming chemicals such as fertilizer or herbicides are used on the non-native grasses. Replacement of the mostly barren steep slope with impervious pavement and native plantings will reduce silt-bearing runoff. However, the overall effects are minor given the absence of significant runoff in the area.

² Knutson, K. L. and V. L. Naef. 1997. Management recommendations for Washington's priority habitats: riparian. Washington Department of Fish and Wildlife, Olympia, WA. 181p.

³ Ibid.

⁴ For example, see Citations of Recommended Sources of Best Available Science for Designating and Protecting Critical Areas. 2002. Washington State Office of Community Development, Olympia, WA. and City of Bellevue's 2005 Best Available Science (BAS) Review (Herrera 2005).

Table 1. Standard Lake Shoreline Buffer Functions and Analysis of Change

Buffer Function	Description of Function	Current Buffer Function	Buffer Function After Re-Development
Shade	The ability to help maintain low water temperatures and create a cool and humid microclimate.	Non-existent for the project site due to a lack of vegetation (trees and shrubs) overhanging or adjacent to Lake Sammamish.	Beneficial Effect – 120 sf of new native plantings adjacent to OHW will replace existing lawn and will offer minor shading.
Beneficial Nutrient Sources	The ability to provide food resources to the Lake in the form of leaf litter, vegetative matter, and terrestrial insects.	Non-existent for the project site due to a lack of native vegetation within the Lake Sammamish shoreline area.	Beneficial Effect – 120 sf of new native landscaping adjacent to OHW will slightly increase nutrients.
Woody Debris Recruitment	The ability to provide large woody debris to Lake Sammamish.	Non-existent for the project site due to a lack of potential recruitment trees near the lake.	No change
Sediment and Pollutant Control	The ability to physically filter sediments, chemicals, and nutrients.	Low due to a lack of native vegetation and little surface water running off of, or across the site.	Beneficial Effect – elimination of runoff from steep slope will reduce sediment load to lake. Less lawn adjacent to OHW will potentially reduce chemical load.
Bank Stability and Sediment Recruitment	The ability to maintain bank stability and prevent increased erosion along the shoreline of Lake Sammamish.	Low due to entirely developed shoreline with lawn up to OHW	No change
Human Access Control	The ability to reduce or eliminate human disturbance along a sensitive shoreline.	None. Access control is not an issue for this private property.	No change
Wildlife Habitat Suitability	The ability to provide habitat for upland mammals and avian species within the riparian corridor.	Low for the site due to general lack of natural vegetation and no large trees.	Beneficial Effect – 520 sf of new native landscaping in shoreline area will increase wildlife forage habitat.

Shoreline Buffer Function: The physical, chemical, and biological processes or attributes of the buffer.

Water Quantity

The project will result in a small increase of impervious surface and no change in land use. Runoff volume from the site will be about the same considering the new pavement replaces relatively impervious hardpacked dirt. Water from the site drains directly to a very large waterbody (Lake Sammamish). The effect on water surface elevation and flow rate will be discountable.

Beneficial Nutrients

Native riparian buffers can be important to aquatic habitat productivity being the primary source of leaf litter and insects delivered to fish habitat. When present, overhanging vegetation contributes leaves, vegetative litter, and small woody debris directly to the waterbody.

No trees or shrubs will be removed from the shoreline buffer area under the proposed action. The applicant has proposed replacement of trees removed from the shoreline on a 2:1 basis. The only tree proposed for removal is small, non-native, and located almost 200 feet from the water. 120 sf of new native vegetation will replace existing lawn in the riparian buffer within 25-feet of OHW. A small increase in beneficial nutrient delivery will occur in this area.

Microclimate

Riparian vegetation has the ability to protect waterbodies from climate changes caused by widespread development away from the water, including soil and air temperature, humidity, and wind. There is no direct link between microclimate and the condition of salmonid habitat, however, it has been suggested that microclimate needs protection to maintain desirable assemblages of plants and animal species, including insects, beneficial to fish.

Upon finishing the new structure, approximately 52 percent of the property will consist of pervious open space compared to 54 percent under existing conditions. Some of the area will be naturally vegetated whereas almost none is under existing conditions. No native vegetation will be removed under the proposed action. The net effect will be no measurable change in the microclimate function of the site.

Temperature & Shade

No vegetation overhanging Lake Sammamish is present on the property and none will be added. No effect on water temperature in Lake Sammamish will occur.

Human Access Control

One function of buffers in populated areas can be reducing the direct encroachment of humans on the watercourse. This project will be conducted on private property where access control is not an issue.

Woody Debris

Large and small woody debris consists of downed tree stems and branches and is a functionally important structural component of watercourses and lakes in the Pacific Northwest.

120 sf of new native vegetation will replace existing lawn in the riparian buffer within 25-feet of OHW. A small increase in woody debris contribution characteristics of the site will be provided.

Bank Stability

Roots from vegetation growing along waterbodies can help stabilize soils and reduce erosion. The sand and gravel found along the subject shoreline naturally aggrades and erodes with no influence of any native plants along the shoreline. No changes are proposed in the nearshore area or within the floodplain. Bank stability will not be affected by the proposed re-development.

Wildlife Habitat Suitability

Almost no native vegetation is found on the site under existing conditions. There is one non-native tree in the shoreline setback area that will remain. A few others located 200-feet from the lake and beyond will be removed and replaced with smaller specimens. 120 sf of new native vegetation will replace existing lawn in the riparian buffer, and 400 sf of additional native landscaping will be added starting about 130 feet from OHW. The effect will be to increase wildlife habitat suitability of the site by a small amount.

Shoreline Function Conclusion

The site is currently developed with an existing residence. Redevelopment consists primarily of replacement of the structure with some minor expansion of the garage and parking area into a steep slope sparsely vegetated with non-native landscaping. No change in development within the Lake Sammamish buffer or setback is proposed. The developed square footage within the Lake Sammamish shoreline area will increase by about 2 percent. The entire area of increase will take place within areas of existing disturbance including the driveway, a lawn, and a cut slope. No disturbance of natural habitat will occur. No work is proposed in sensitive areas. No natural vegetation will be disturbed. With mitigation, new native plantings totaling 520 sf will be added to the shoreline with 120 sf of that being placed within 25-feet of OHW. Under the Shoreline Management Act, this level of protection will provide “no net loss” of shoreline ecological functions necessary to sustain shoreline natural resources.

Applicability with decision criteria 20.25H.255.B

1. The proposal includes plans for restoration of degraded critical area or critical area buffer functions which demonstrate a net gain in overall critical area or critical area buffer functions;

The proposal includes plans to replace 120 sf of lawn in the Lake Sammamish buffer with new native plantings. This will offset the minimal habitat functions lost by stabilization of 1,200 sf of steep slope located upland of the house and more than 130 feet from the lake. The discussion of critical area function gain is provided above with a conclusion that “no net loss” of shoreline ecological functions has been achieved under the proposed action.

2. The proposal includes plans for restoration of degraded critical area or critical area buffer functions which demonstrate a net gain in the most important critical area or critical area buffer functions to the ecosystem in which they exist;

Table 1 provided above summarizes the most important critical area functions for the mitigation area within the Lake Sammamish buffer and compares existing versus proposed (restored) conditions. No loss of functional habitat is expected due to the proposed changes to the steep slope area. Functional habitat increases are expected for shade, beneficial nutrients, water quality, and wildlife habitat within the shoreline area, and particularly the critical area adjacent to Lake Sammamish.

3. The proposal includes a net gain in stormwater quality function by the critical area buffer or by elements of the development proposal outside of the reduced regulated critical area buffer;

Stormwater quality functions will be increased under the proposed action in two ways: 1) Replacement of some of the lawn within the Lake Sammamish buffer with new native plantings will slightly improve the quality of runoff from the site assuming chemicals such as fertilizer or herbicides are used on the non-native grasses; and 2) Replacement of the mostly barren steep slope with impervious pavement and native plantings will reduce silt-bearing runoff to Lake Sammamish.

4. Adequate resources to ensure completion of any required mitigation and monitoring efforts;

Costs to complete the proposed mitigation will be undertaken as part of the redevelopment action with only minimal additional costs. Monitoring will be completed by the homeowner.

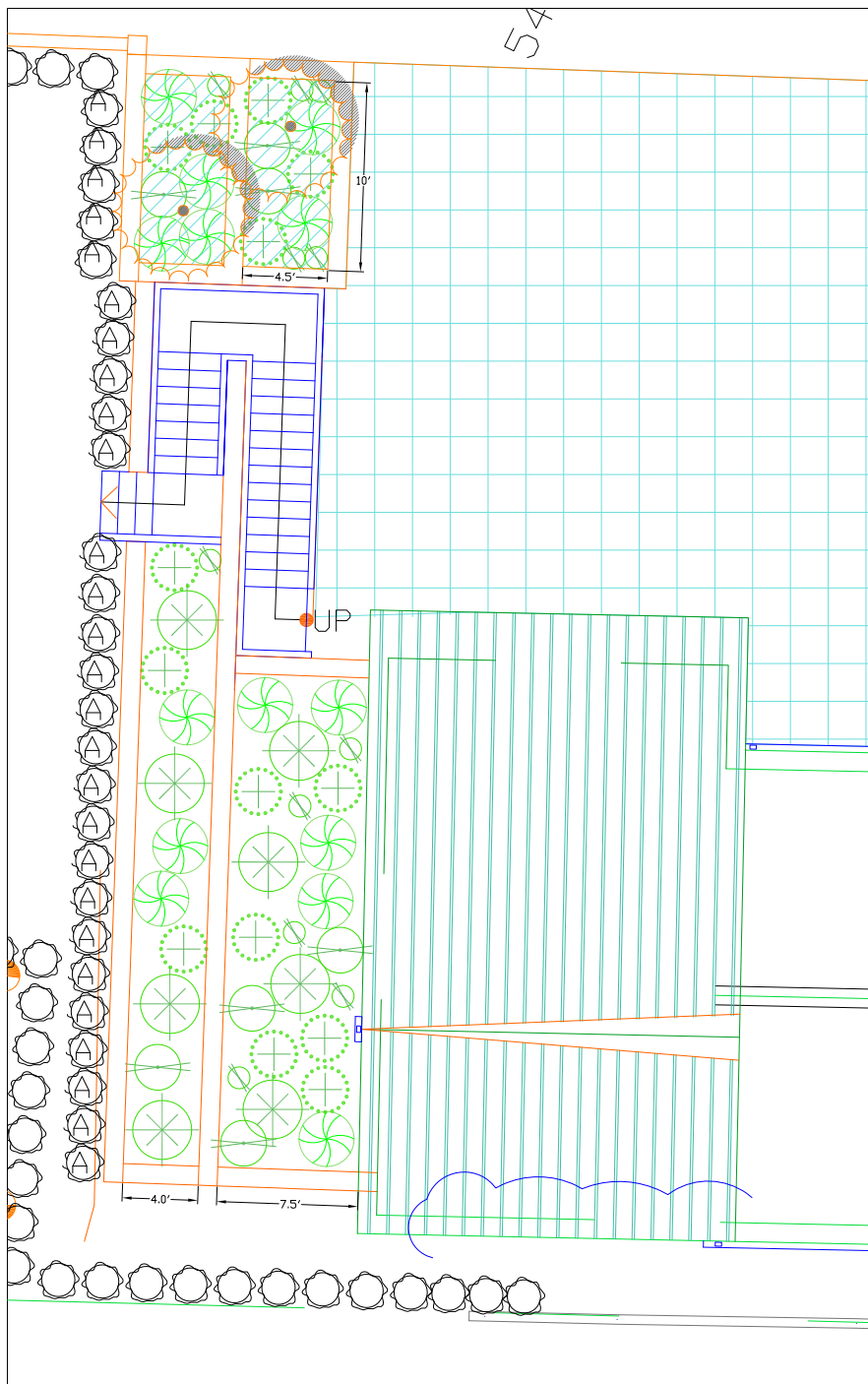
5. The modifications and performance standards included in the proposal are not detrimental to the functions and values of critical area and critical area buffers off-site; and

Proposed modifications involve reconfiguration of a small area of existing lawn, elimination of a steep slope limited to the applicant's property, and planting of some native shrubs. These changes will have no effect off-site.

6. The resulting development is compatible with other uses and development in the same land use district.

The proposed house and landscaping will be similar in size, quality, and vegetation with other residences in the area. No conflicts are expected.

Figures - Mitigation planting plan









Restoration Goal: Plant 412 square feet of shoreline area with native trees, shrubs, and groundcovers.

Plant counts are based on providing small shrubs and ferns at 2.5' on-center; rhododendron at 5' o.c.; and groundcovers/perennials at 1' o.c.

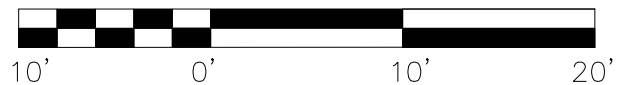
PLANT NAME AND SPECIES

SIZE

#

	LILY-OF-THE-VALLEY (<i>Maianthemum dilatatum</i>)	4"	11
	SWORD FERN (<i>Polystichum munitum</i>)	1-GAL	14
	LOW OREGON GRAPE (<i>Mahonia nervosa</i>)	1-GAL	6
	SALAL (<i>Gaultheria shallon</i>)	1-GAL	14
	RHODODENDRON (<i>Rhododendron</i> sp.)	1 to 5-GAL	8
	MAPLE (<i>Acer</i> sp.)	5-GAL or BB	2

GRAPHIC SCALE 1"=10'

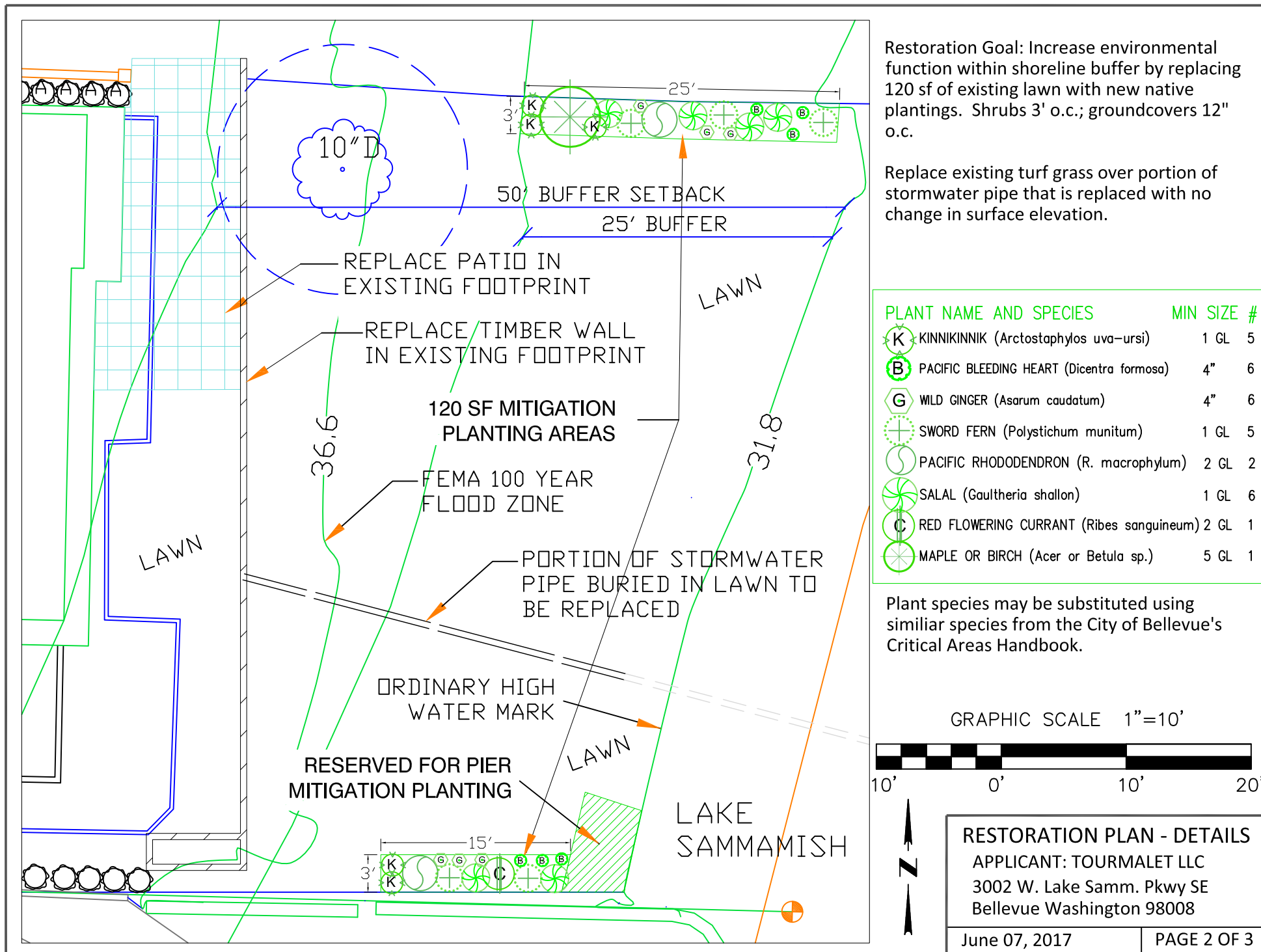


PLANTING PLAN - DETAILS

APPLICANT: TOURMALET LLC
3002 W. Lake Samm. Pkwy SE
Bellevue Washington 98008

June 07, 2017

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PLANTING DETAILS

PLANT INSTALLATION

1. Plant materials shall be nursery grown or collected in the Puget Sound area. Plants shall be normal in pattern of growth, healthy, well-branched, vigorous, with well-developed root systems, and free of pests and diseases. Damaged, diseased, pest-infested, scraped, bruised, dried out, burned, broken, or defective plants will be rejected.
2. If selected species are not available or desirable, then similar species may be substituted with approval from owner and City of Bellevue.
3. Planting shall occur during the cool season (September 15 through March 15).
4. Landscaper shall examine soils in the area to determine suitability for selected plants. New topsoil or compost amendment shall be added to a depth of 12" where necessary to support plants.
5. Plant all groundcover plants approximately 12-inches on center.
6. Immediately after planting, plants shall be watered to saturation.
7. Planting locations shown on the plan are approximate. Actual planting locations shall be field determined at time of planting by landscape architect or biologist. If significant changes are made, an as-built plan shall be prepared and submitted to the City of Bellevue. A minimum of 412 sf of new plantings shall be installed and maintained.
8. Provide good quality landscape mulch around all shrubs.

LANDSCAPING MAINTENANCE

1. Controlling any non-native species and re-establishing native vegetation are the primary goals of this maintenance plan. Activities required to maintain new plantings include initial watering of the new plants, and periodic removal of non-native vegetation (weeding) within the planting area.
2. New plantings shall be watered from May through mid-October during the first season. A temporary irrigation system is allowed. A potable water source is available for this use.
3. Due to the aggressively invasive habit of many non-native species around Lake Sammamish, and the existence of nearby seed sources, control efforts shall be completed for five years following initial plant installation. Establishment of native plantings over the five year time period will create a well established native habitat lessening the chance for non-native vegetation invasion.
4. The control of invasive weeds (competing grasses and herbs) shall be mechanically provided throughout the planting area at a minimum of twice per year, or more should additional weeding be deemed necessary. The optimal season for weed control occurs in April thru September. The use of herbicides and pesticides after new planting operations is strictly prohibited unless given written permission by the City of Bellevue. All work shall be performed by hand with the lightest possible equipment.

MONITORING

1) Compliance monitoring consists of evaluating the plants and shoreline planting area immediately after plant installation. The objective is to verify that all design features, as agreed to in the plans, have been correctly and fully implemented, and that any changes made in the field are consistent with the intent of the design. Evaluation of the planting areas after restoration will be done by the homeowner. A brief compliance report will be prepared describing final plant counts and noting any substitutions or movement of plants when compared to the design. Rationale for changes shall be provided. Three photo points will be established giving complete coverage of the buffer area.

2) Long Term Monitoring – New plantings will be monitored in the summer once a year for a five year period. Monitoring will be conducted by the homeowner to quantify the survival, relative health and growth of plant material. An annual monitoring report submitted to the City following each years monitoring visit will describe and quantify the status of the mitigation and provide the three photos from the same locations as the compliance report.

Vegetation monitoring will consist of plant inspection to determine the health and vigor of the installation. All planted material in the buffer will be inspected during each monitoring visit to determine the level of survival of the installation. Each shrub and tree will be rated either as dead, dying, or healthy. Dead or dying material will be replaced the following fall unless plant crowding is believed to be a problem. Plant species substitutions may be made if site conditions are believed responsible for plant mortality. Replacement plants must be approved by the City. Volunteer native, non-invasive species will be included as acceptable components of the mitigation project. Ground covers will be rated as percent ground coverage for each of the major areas covered with these species.

At least three photo points will be established giving complete coverage of the buffer area. Photos will be taken at each point during every monitoring visit and submitted as part of the annual monitoring report.

PERFORMANCE STANDARDS

Year 1 (from date of plant installation)

- 100% survival of all installed plants and/or replanting in following dormant season to reestablish 100% of original plantings
- Less than 10% coverage of invasive plants in planting area.

Year 2 (from date of plant installation)

- At least 90% survival of all installed material (100% of trees)
- Less than 10% coverage of planting area by invasive species or non-native/ornamental vegetation.

Year 3, 4, & 5 (from date of plant installation)

- At least 85% survival of all installed material (100% of trees)
- At least 35% (Yr3), 50% (Yr4), 70% (Yr5) coverage of the planting area by native plants in each year respectively.
- Less than 10% coverage by invasive species or non-native/ornamental vegetation.

PLANTING PLAN - DETAILS

APPLICANT: TOURMALET LLC
3002 W. Lake Samm. Pkwy SE
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June 7, 2017

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